

I CLAIM:

2           1. A method of processing meat which comprises the  
3 steps of contacting bodies of meat with a treating solution;  
4 agitating said bodies of meat in contact with said treatment  
5 solution at a temperature of substantially 45°F to 60°F until  
6 said bodies of meat are substantially dry; and recovering said  
7 bodies of meat in a substantially dry state.

1           2. A method of processing meat comprising the steps of:  
2           (a) contacting bodies of meat with a treating solution;  
3           (b) heating said bodies of meat in contact with said  
4 treating solution in an agitator to a predetermined elevated  
5 temperature and maintaining said temperature substantially  
6 constant while agitating said meat for a period of time  
7 sufficient to distribute the treating solution in the meat;  
8           (c) thereafter cooling the bodies of meat in said  
9 agitator while continuing to agitate the meat; and  
10          (d) recovering said bodies of meat in a substantially  
11 dry state from said agitator.

1           3. The method defined in claim 2 wherein said bodies  
2 of meat are contacted with said treating solution by injecting  
3 said bodies of meat with an inject at a temperature less than  
4 said elevated temperature and said agitator is a rotary paddle  
5 massager or a tumbler.

6           4. The method defined in claim 3 wherein said elevated  
7       temperature is between substantially 45°F and 60°F, said temper-  
8       ature less than said elevated temperature is substantially 15° to  
9       40°F below said elevated temperature and the meat is cooled by  
10      15° to 40°F below said elevated temperature in step (c).

1           5. The method defined in claim 2 wherein said elevated  
2       temperature is controlled in step (b) by measuring directly a  
3       temperature of the bodies of meat in said agitator and regulating  
4       a temperature of said agitator in response to the measured  
5       temperature.

1           6. The method defined in claim 5 wherein said  
2       temperature of the bodies of meat in said agitator is measured by  
3       causing said bodies of meat to contact directly a temperature  
4       sensor mounted in a wall of the agitator.

1           7. The method defined in claim 5 wherein said  
2       temperature of the bodies of meat in said agitator is measured by  
3       inserting a temperature measuring sensor into bodies of meat in  
4       said agitator.

1           8. The method defined in claim 2 wherein said bodies  
2       of meat are selectively heated and cooled in said agitator by  
3       selectively passing a heated or cooled fluid through a jacket  
4       thereof.

1           9. A method processing meat which comprises the steps  
2 of contacting bodies of meat with a treating solution; agitating  
3 said bodies of meat in contact with said treatment solution at a  
4 predetermined temperature until said bodies of meat are sub-  
5 stantially dry while controlling said temperature within  $\pm 2^{\circ}\text{F}$ ;  
6 and recovering said bodies of meat in a substantially dry state.

1           10. The method defined in claim 9 wherein said  
2 temperature is controlled by measuring directly a temperature of  
3 the bodies of meat during agitation thereof by contact of a  
4 sensor with the bodies of meat, and regulating a temperature of  
5 a vessel in which said bodies of meat are agitated in response to  
6 the measured temperature.

1           11. An apparatus for processing meat which comprises:  
2           a vessel for receiving bodies of meat in contact with a  
3 treating liquid and for agitating said bodies of meat to  
4 distribute said treating liquid in said bodies of meat; and  
5           means for selectively heating and cooling said vessel  
6 during the agitation of said bodies of meat therein.

1           12. The apparatus defined in claim 11 wherein said  
2 vessel has a jacket, said means for selectively heating an  
3 cooling said vessel comprising a refrigeration unit for

4 circulating a cooling liquid through said jacket and a heater for  
5 passing a heating liquid through said jacket.

1               13. The apparatus defined in claim 11, further  
2 comprising a temperature sensor positioned for direct contact  
3 with bodies of meat in said vessel and operatively connected to  
4 said means for selectively heating and cooling said vessel for  
5 controlling a temperature of said vessel during the agitation of  
6 said bodies of meat therein.

14. The apparatus defined in claim 13 wherein said temperature sensor extends through a wall of said vessel and is thermally insulated therefrom to respond directly to a surface temperature of bodies of meat in said vessel.

15. The apparatus defined in claim 13 wherein said temperature sensor is provided with a member capable of being thrust into said vessel to pierce a body of meat therein.

1               16. The apparatus defined in claim 15 wherein said  
2 member has a plurality of sensing regions along a length thereof  
3 for providing an average temperature of the body of meat pierced  
4 thereby.

1                   17. The apparatus defined in claim 11 wherein said  
2 vessel is a massager having a massaging drum formed with a

3       temperature control jacket and a rotary paddle in said drum, said  
4       means for selectively heating and cooling said vessel including  
5       means for selectively circulating a heated and a cooled liquid  
6       through said jacket, said apparatus further comprising  
7       programming means for raising a temperature of said bodies of  
8       meat in said massaging drum to a predetermined elevated  
9       temperature while massaging said bodies of meat with a controlled  
10      torque of said rotary paddle.

1                 18. The apparatus defined in claim 17, further  
2       comprising a temperature sensor positioned for direct contact  
3       with bodies of meat in said massaging drum and operatively  
4       connected to said means for selectively circulating said heated  
5       and a cooled liquid through said jacket for controlling a  
6       temperature of said massaging drum during the agitation of said  
7       bodies of meat therein.

1                 19. The apparatus defined in claim 18 wherein said  
2       temperature sensor extends through a wall of said massaging drum  
3       and is thermally insulated therefrom to respond directly to a  
4       surface temperature of bodies of meat in said massaging drum.

1                 20. The apparatus defined in claim 18 wherein said  
2       temperature sensor is provided with a member capable of being  
3       thrust into an interior of said massaging drum to pierce a body  
4       of meat therein.